

## EDUCATION

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### Brisbane, Australia

*BEng(Hons) Software Engineering.  
Second Class Honours: Division A  
Engineers Australia - GradIEAust*

Queensland University of Technology  
*Feb 2018 – Nov 2022*

## EMPLOYMENT

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### Graduate Software Engineer

*July 2023 – Current*

Renovo Solutions – Brisbane, Aus

- Managed a real-time IoT data pipeline integrating **Chirpstack**, **NodeRed**, **Postgres** and **Grafana**, enabling seamless monitoring and visualization of critical construction metrics.
- Developed and maintained in house full-stack applications using **FastApi** and **NextJS** to automate internal processes.
- Streamlined deployment of web services using **docker** and **kubernetes**, implementing Azure Blob Storage for scalable data backups and **Kafka** producers/consumers for reliable messaging.
- Redesigned internal hardware systems by independently creating optimized **PCB** designs, reducing manufacturing time by 30%, minimising spacial requirements, and enhancing device reliability.
- Designed and developed an in-house concrete maturity sensor system utilising **C++**, **LoraWAN** and the existing data pipeline, improving concrete works efficiency by 25%

### Junior Electric Vehicle Technician

*June 2022 – Feb 2023*

Oz-Diy – Brisbane, Aus

- Designed and implemented large battery packs for electric vehicles and other electrical systems.
- Collaborated with clients to define requirements and deliver tailored solutions.
- Developed **C++** software for a pre-charger unit on Arduino, enhancing startup efficiency.

### Smartphone Technician

*Feb 2021 – Feb 2022*

HappyTel – Brisbane, Aus

- Managed daily operations and trained new staff for seamless team integration.
- Communicated effectively with diverse groups, including non-native english speakers.

## PROJECTS

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### Project & Report Sharepoint Generator

- Self driven and developed full stack application utilising a **python** backend with **FastAPI** and a **NextJS** based frontend.
- Utilised **postgres** database server and pgadmin client for efficient data storage and tracking
- Dockerised application for improved portability, isolation and scalability.

### Object Detection Image Viewer

- Worked within a **scrum** team to develop and deploy cloud based application.
- Made use of third party resources such as Flickr's **RestAPI** and Tensorflow object detection models.
- Created a Single Page Application frontend using **javascript** and **Redis**.

## TECHNICAL SKILLS

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- Languages: Python, Javascript/HTML/CSS, C++, SQL, Bash
- Frameworks and Libraries: FastAPI, Node.js, Next.js, Express.js
- Tools: Git, Linux, Docker, Kafka, Kubernetes, Devops, LoraWAN, Chirpstack, NodeRed, Postgres, Grafana, Redis